IN THE CLAIMS:

A complete listing of all the claims is now presented.

Claims 1 to 11. (Cancelled).

Claim 12. (Cancelled).

Claim 13. (Currently Amended).

A network for data transmission comprising a process control according to claim ~~12,~~ 22, ~~characterized in that~~

wherein connections between the terminals of a hub switch (1, 1') and/or relays of saved data to one of the terminals occur according to presettable priorities.

Claim 14. (Currently Amended).

A network for data transmission comprising a process control according to claim ~~12,~~ 22, ~~characterized in that~~

wherein at least one terminal on at least one hub switch (1) is connected as a programming input (4).

Claim 15. (Currently Amended).

A network for data transmission comprising a process control according to claim ~~12,~~ 22, ~~characterized in that~~

wherein the hub switches (1, 1') are linked and/or networked with one another via fiberoptic cable (2).

Claim 16. (Currently Amended).

A network for data transmission comprising a process control according to claim ~~12,~~ 22, ~~characterized in that~~

wherein the hub switches (1, 1') are at least partially linked and/or networked with one another via electrical data lines.

Claim 17. (Currently Amended).

A network for data transmission comprising a process control according to claim ~~12,~~ 22, ~~characterized in that~~

wherein alternatively to the hub switches (1, 1') and/or on a terminal of at least one hub switch (1'), a bus system (9) is provided.

Claim 18. (Currently Amended).

A network for data transmission comprising a process control according to claim 17, ~~characterized in that~~

wherein the bus system (9) links together access control units (11) monitored by a transmission authority control (12), via which the bus (10) of the previously mentioned system (9) is connected with the assigned terminal of the hub switch (1') and/or with a central processing unit (6), with slave processors (7) and/or with a programming device (4), with the transmission authority control (12) exclusively switching the transmission authority of the access control units (11) cyclically and/or according to presettable priority.

Claim 19. (Currently Amended).

A network for data transmission comprising a process control according to claim 18, ~~characterized in that~~

wherein each bus system (9) has its own transmission authority control (12).

Claim 20. (Currently Amended).

A network for data transmission comprising a process control with modules (3, 9) linked for data exchange, ~~particularly~~ according to claim ~~12,~~ 22, ~~characterized in that~~

wherein in ~~a~~ said process control with several linked programmable controllers, each including a central processing unit (6) and several slave processors (7), at least one

controller has its central processor (6) and slave processors (7) connected with one another and with the network via a bus system (9), which links access control units (11) monitored by a transmission authority control (12), via which the bus (10) of the bus system (9) is connected with the processors (6, 7) and/or with the network, with the transmission authority control (12) exclusively switching the transmission authority of the access control units (11) cyclically and/or according to presettable priority.

Claim 21. (Currently Amended).

A network for data transmission comprising a process control according to claim 18, ~~characterized in that~~

wherein the access control units (11) temporarily save transmission data of the assigned data modules until transmission authority is received.

Claim 22. (New).

A network for data transmission comprising a process control having programmable controllers (3) respectively including a central processing unit (6) and slave processors (7) assigned to said central processing unit, and a network linking said controllers (3) for data transmission via hub switches (1, 1^1)

and/or busses provided with several terminals and assigned and/or integrated memory array;

said hub switches (1, 1^1) connecting its terminals in pairs while disconnecting them from all other terminals and/or temporarily storing data packets forwarded via the terminals separately and forwarding them to the respectively addressed terminal only when said terminal is available and/or can be made available for data reception;

said busses linking together access control units (11) which are controlled by a transmission authority control (12) and via which the respective bus receives data from interface modules (5) linked to the busses;

said controllers being respectively assigned to one of said hub switches and/or busses;

said hub switch and/or bus having separate terminals for the central processing unit (6) and the slave processors (7) of the assigned controller (3), thereby enabling each slave processor of a respective controller (3) for exchanging data with an arbitrary controller or a module (5) thereof while circumventing its assigned central processor unit (6).